

Work Order ID 85797

June-15-12 10:49:12 AM

85797

Page 1

Item ID: D2894-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: 2.750 Support

Start Date: 15/06/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 27/07/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: *MLJ*

Date: *12/06/15* Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2894	E

100

100

HAAS I

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo

Machine as per Folio FA253
Tumble & Deburr

0.00

0.00

sf 12/08/07

FK 12/08/05

5

1

PTO

110

110

QC

Quality Control

QC1- Inspect dimensions to dimension sheet

Memo

0.00

0.00

sf 12/08/07

FK 12/08/05

5

1

120

120

QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

B.A 12/08/07


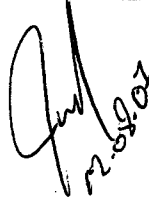

5

0

NCR: ☒ Yes ☐ No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: [Signature] Date: 12/09/07QA Closed: 18 Date: 12/9/7

Work Order: <u>85797</u>				DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. <u>D2694-1</u>				Rework <input type="checkbox"/>		Skid-tube <input type="checkbox"/>		Crosstube <input type="checkbox"/>		Prod. Eng. Coord. <input type="checkbox"/>		Engineering <input type="checkbox"/>	
NCR No. <u>12-1672</u>				Scrap <input checked="" type="checkbox"/>		Machining <input checked="" type="checkbox"/>		Small Fab <input type="checkbox"/>		Rec/Store/Packaging <input type="checkbox"/>		Quality <input type="checkbox"/>	
				Use-as-is <input type="checkbox"/>		Thermoforming <input type="checkbox"/>		Finishing <input type="checkbox"/>		Supplier <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>		Large Fab <input type="checkbox"/>		Composite <input type="checkbox"/>		Other <input type="checkbox"/>			
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input checked="" type="checkbox"/>		12/08/05	100	1	The S.O. was incorrect regarding the 1/2" drill causing the Drill to burr/overheat and harden the mat. 2-L inaccurate information on file and training operator	 DAS 16 12/08/05	Changed for the proper 1/2" drill (with insert) Scrap + Drill with D2694-1 No Replace.	F.K. 12/08/05	 12-08-07	 12/08/05			
Equip/Tooling <input type="checkbox"/>													
Operator <input checked="" type="checkbox"/>													
Material <input type="checkbox"/>													
Offset/Setup <input type="checkbox"/>													
Other <input type="checkbox"/>													
Process <input type="checkbox"/>													
Supplier <input type="checkbox"/>													
Training <input checked="" type="checkbox"/>													
Unauthorized <input type="checkbox"/>													
FAULT CATEGORY													
Landing Gear				Hardware				General					
<input type="checkbox"/> Bending Passes Below Min				<input type="checkbox"/> Breaking				<input type="checkbox"/> Burrs					
<input type="checkbox"/> Centre Not Concentric to O/S				<input type="checkbox"/> Missing				<input type="checkbox"/> Contamination					
<input type="checkbox"/> Cracks				<input type="checkbox"/> Size/Length				<input type="checkbox"/> Cut Too Short					
<input type="checkbox"/> Crushed/Crimp at Bending				<input type="checkbox"/> Spinning				<input type="checkbox"/> Documentation/Data					
<input type="checkbox"/> Inspection Strip in Tube				<input type="checkbox"/> Threading				<input type="checkbox"/> Finish					
<input type="checkbox"/> Other				<input type="checkbox"/> Wrong				<input type="checkbox"/> Inspection Incomplete					
<input type="checkbox"/> Positioned Wrong				Drill Holes				<input type="checkbox"/> Inspection Unqualified					
<input type="checkbox"/> Ripples on Inner Bend				<input type="checkbox"/> Misaligned				<input type="checkbox"/> Instructions Incomplete/Unclear					
<input type="checkbox"/> Torque Waves in Extrusion				<input type="checkbox"/> Ovalized				<input type="checkbox"/> Jigs/Fixtures/Tooling					
<input type="checkbox"/> Turning Sequence				<input type="checkbox"/> Over/Undersized				<input type="checkbox"/> Kit Incorrect					
<input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Too Many				<input type="checkbox"/> Kit Missing					
								<input type="checkbox"/> Maintenance					
								<input type="checkbox"/> Mislabeled					
								<input type="checkbox"/> Off-Set					
								<input type="checkbox"/> Orientation Misread					
								<input type="checkbox"/> Out of Calibration					
								<input type="checkbox"/> Out of Sequence					
								<input type="checkbox"/> Outside Dimensions					
								<input type="checkbox"/> Over/Under tolerance					
								<input type="checkbox"/> Part Lost					
								<input type="checkbox"/> Part Moved					
								<input type="checkbox"/> Raw Material					
								<input type="checkbox"/> Set-up					
								<input type="checkbox"/> Supplier					
								<input type="checkbox"/> Temperature/Cure					
								<input type="checkbox"/> Weld					
								<input type="checkbox"/> Wrong Stock Pulled					
								<input type="checkbox"/> Other					

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Page 2

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Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Identify as per dwg & Stock Location: LG52

0.00

130

Packaging

Memo

0.00

Packaging

AS 12-8-7

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

12/8/9 78

1208-9

Picklist Print

June-15-12 10:49:16 AM

Page 1

Work Order ID: 85797

85797

Parent Item: D2894-1

D2894-1

Parent Item Name: 2.750 Support

Start Date: 15/06/2012

Required Date: 27/07/2012

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP: B02.11.26Added mask holeKJ

IPP Rev:C ECN 993 07-11-07 DD verified by:EC

IPP D 08.03.19 Re-format EC verified by DD

IPP REV:E

11.10.03 ASPER REV.C DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK079		Manufactured	No			100	Each	11.0000	0.5	3			

DSK079

D2894-1 TURNING DETAIL

**

3

12/08/03

Location

Loc Qty

Loc Code

MAT060

11

72634

2

72658

3

84786

6

3

DART AEROSPACE LTD		Work Order:	85797
Description: Ø2.750 Support		Part Number:	D2894-1
Inspection Dwg: D2894		Rev: D	Page 1 of 1

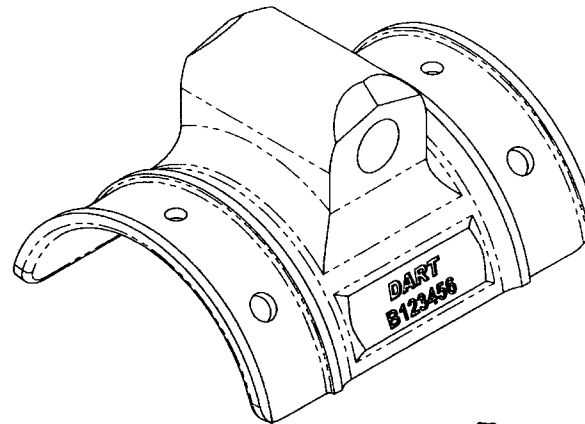
FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
HAAS Section								
AA	0.454	0.474		.464	.464	.463	.466	.466
AB	3.062	3.082		3.072	3.071	3.072	3.0735	3.073
AC	0.053	0.073		.063	.063	.063	.063	.063
AD	1.766	1.786		1.780	1.776	1.776	1.776	1.776
AE	0.020	0.040		.040	.030	.030	.030	.030
AF	0.260	0.267		.261	.261	.261	.261	.261
AG	0.170	0.190		.175	.170	.175	.175	.175
AH	0.150	0.170		.160	.160	.160	.160	.160
AI	1.990	2.010		2.002	2.002	2.0015	2.002	2.001
AJ	0.240	0.260		.250	.250	.250	.250	.250
AK	1.880	1.900		1.892	1.897	1.8835	1.882	1.898
AL	0.500	0.505		.500	.500	.500	.500	.500
AM	0.188	0.194		.189	.187	.189	.189	.189
AD - 1.766 - 1.786								
AD - 1.766 - 1.786								
Ensure that Ø0.500" bore is perpendicular to 1.389" bore within 0.003"								
Accept/Reject				.0015	.003	.001	.002	.001

Measured by:	E.K. / 12/08/06	Date:	12/08/05
Audited by:	B.A.	Date:	12/08/07
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	06.03.08	DT8708 added to dimension AM	KJ/JLM	
C	06.11.22	Note added to HAAS section	KJ/JLM	
D	08.04.22	Reformat; Dwg Rev updated	KJ/DD	
E	08.11.25	Dimensions updated per Dwg Rev. D	KJ/JLM	
F	09.05.04	Dimension AN (0.926) removed	KJ/JLM	



D2894-1 Ø2.750 SUPPORT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 85797 MLO
12/06/15

RELEASED
2011-09-29
JNY

NOTES:

- 1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION
PER ASTM A564 OR AMS 5643 OR AISI 630
MIN UTS = 170 KSI (38 HRC)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 TO 0.020 MAX
- 6) 0.50" WIDE x 1.56" LONG x 0.005" MIN HEIGHT FLAT,
WITH R0.25 RADIUS OF TRANSITION IN THIS AREA
IDENTIFY WITH DART LOGO AND PART NUMBER ON ONE
SIDE AND DART LOGO AND BATCH NUMBER ON OPPOSITE
SIDE USING 0.010-0.020 DEEP LETTERING
- 7) WEIGHT: 0.98 lbs

E	REMOVE PRIMER & UPDATE MAT'L SPEC (ZN A8-1), 2.00 WAS 2.000 (C3-2), 4.00 WAS 4.000 (C6-2), REF. CAR 11-51	CP	11.09.07
D	DRAWING REFORMATTED, POWDER COAT FINISH REMOVED, CHAMFERS ADDED TO TOP OF PART TO CLEAR ROCKER BEAM, PER BELL TECH BULLETIN 407-08-84. B5-2 0.261 HOLE WAS 0.257. B2-2 REAM FINISH INSTRUCTION ADDED.	AJS	08.11.06
C	ADD MASKING AND PRIME ONLY NOTES, REFORMATTED DRAWING.	DC	07.07.04
B	AS MANUFACTURED	CP	02.07.17
A	NEW ISSUE	CP	02.04.02
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AS		
CHECKED	AS	DRAWING NO. D2894	REV. E
MFG. APPR.	AS	SHEET 1 OF 2	
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	Ø2.750 SUPPORT	NTS
DATE	11.09.07	<small>COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

PROGRAMMED BY:

VERIFY BY:

QC APPROVED:

DART
DART AEROSPACE LTD

FOLIO #:

FA253

FOL REVISION:

PREPARED BY:

CNC PROGRAM LOG

PART NUMBER: D2894

SUPPORT CLAMP

REV:E

(SURFCAM99)

DSN /PATH FILE	NCC FILE	DESCRIPTION	HOLDER	TOOL	T#	SPEED	FEED	P	H# / L
		PROGRAM # 4000 G58 SETUP # 3							
		OPERATION # 4 (4-AXIS MILLING) CONTINUED							
PVA253AA04.60	→	FINISH FLAT TEXT SECTION TOP LH	6	1" 1/8-RAD BULL	19	1800	6	3	
PVA253AA04.61	→	FINISH FLAT TEXT SECTION BOTT LH	6	1" 1/8-RAD BULL	19	1800	6	3	
PVA253AA04.62	→	FINISH FLAT TEXT SECTION TOP RH	6	1" 1/8-RAD BULL	19	1800	6	3	
PVA253AA04.63	→	FINISH FLAT TEXT SECTION BOTT RH	6	1" 1/8-RAD BULL	19	1800	6	3	
PVA253AA04.64	→	FINISH TOP X- BOLT SURFACE SCALLOP 0.0005	6	1" 1/8-RAD BULL	19	1800	8	2	
PVA253AA04.65	→	FINISH BOTT X-BOLT SURFACE SCALLOP 0.0005	6	1" 1/8-RAD BULL	19	1800	8	2	
PVA253AA04.66	→	CENTER DRILL .500 DIA HOLES	5	#4 CENTER DRILL	1	1222	1	1	
PVA253AA04.67	→	DRILL .500 DIA HOLES	7	.500 " KENN INSERT DRILL	17	800	1.5	1.5	
PVA253AA04.68	→	MACHINE CHAMFER TOP BACK	7	3/4" -60 DEG CARB CHAMFER	20	1500	5	5	
PVA253AA04.69	→	MACHINE CHAMFER TOP FRONT	7	3/4" -60 DEG CARB CHAMFER	20	1500	5	5	
PVA253AA04.70	→	MACHINE CHAMFER BOTT FRONT	7	3/4" -60 DEG CARB CHAMFER	20	1500	5	5	
PVA253AA04.71	→	MACHINE CHAMFER BOTT BACK	7	3/4" -60 DEG CARB CHAMFER	20	1500	5	5	
PVA253AA04.72	→	SLIT PART TOP FRONT SIDE 1ST CUT LEAVE 0.100 BOTT	6	3/8 SGS CARBIDE END	7	800	3.5	3.5	
PVA253AA04.73	→	SLIT PART TOP FRONT SIDE 2ND CUT LEAVE 0.040 BOTT	6	3/8 SGS CARBIDE END	7	800	3.5	3.5	

Ref only